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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,984	09/29/2000	Jae Gon Kim	300055.468	1749

7590 01/30/2006  
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EXAMINER

BUI, KIEU OANH T

ART UNIT PAPER NUMBER

2611

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/675,984

Applicant(s)

KIM ET AL.

Examiner

KIEU-OANH T. BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5,8,10-18,20,23,25,27,30 and 33-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8,10-18,20,23,25,27,30,33-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 07/08/05 has been entered.

### ***Specification***

2. The abstract of the disclosure is objected to because of the deletion and the underlined phrases, a new and clean abstract on a single sheet is suggested. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

3. Claims 5 and 8 are objected to because of the following informalities: "...of claim 3..." should be corrected to --of claim 1--because claim 3 was canceled. Appropriate correction is required.

### ***Remarks***

4. Claims 3-4, 6-7, 9, 19, 21-22, 24, 26, 28-29, 31-32 were previously cancelled, and pending claims are claims 1-2, 5, 8, 10-11, 12-18, 20, 23, 25, 27, 30, and 33-56 are for examination.

***Claim Rejections - 35 USC 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

6. Claims 1-2, 5, 8, 10-11, 12-18, 20, 23, 25, 27, 30, 33-43, 51-54, and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Maybury et al. (US Patent No. 6,961,954 B1).

Regarding claims 1 and 17, Maybury discloses an architecture and a computer-readable recording medium, wherein a hierarchical summary description scheme (DS) for describing a video summary comprising at least one highlight segment DS corresponding to one of a plurality of video summary intervals, wherein the highlight segment DS which further comprising a video segment locator DS describing time information or a video itself of the highlight segment and an image locator DS describing a representative frame of the highlight segment (Fig. 16 for a broadcast news navigator for describing story of news/event segments, the screen of Fig. 16 is a video summary for highlight segments which further including a representative image of each of video segments/intervals and its description of related information including time information or a video itself; with a closer view in Figs. 19 & 20 for each of the plurality of video summary intervals with its video/audio clips/segments and its time information as date and time start or

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time duration, see further on col. 2/line 64 to col. 3/line 32, col. 3/line 65 to col. 4/line 25; col. 18/lines 10-17).

As for claim 2, Maybury further discloses at least one lower level highlight level DS (Fig. 13 for a hierarchical structure with more than one lower level highlight level DS for further information such as closed caption 308 or video time data or story segment 310 for video 304 which represented by story summary 315 as indicated above.

(Claims 3-4 were cancelled).

As for claim 5, Maybury further discloses a sound locator DS that describes the representative sound information of the corresponding highlight segment (col. 6/lines 40-52 for audio data and even including closed caption for text captured of audio data of the content is stored and located by a keyframe).

(Claims 6-7 were cancelled).

As for claim 8, Maybury further discloses an audio segment locator DS that describes the audio segment information constituting an audio summary of the corresponding highlight segment (col. 7/lines 45-60 & col. 8/lines 15-38 & col. 8/line 65 to col. 9/line 9 for video summary includes audio segment information).

(Claim 9 was cancelled).

As for claim 10, Maybury further discloses the hierarchical summary DS further includes an attribute of a summary component list the describes and enumerates the summary component types representing types of summary (Fig. 13 for the attribute of "story type" in story segment 310 for different types related to each story segments and/or the attribute of "type" in "named\_entity" 316 for different types related to names).

As for claim 11, Maybury further discloses the summary component type comprises keyframes representing a key frame summary composed of representative frames, and further with key video clips, key Events, and key Audio clips for describing each content (Figs. 16, 19-20, and col. 2/line 64 to col. 3/line 3 and col. 3/line 65 to col. 4/line 25 for key frame identifiers for each story/event segment, either in video and/or audio segments).

As for claim 12, Maybury discloses this feature for summary theme list related to the event and/or subject for the user to being able to execute summarizing and browsing based on the event (Fig. 16 for themes in box 312; and Figs. 21-22 for examples to search for an event or subject).

As for claim 13-16, Maybury discloses these limitations for themeID and theme list for searching common subjects or events and attributes of theme IDs describing the event or subject of the highlight segment using the attribute of ID described in the summary theme in DS (Fig. 21 for searching common subjects and/or events based on their IDs as discussed earlier above, and Fig. 22 for attributes related to the theme ID for description of further theme ID, i.e., all the words and/or these words in a phrase can be listed in the search for a topic or theme).

Regarding claims 18 and 25, Maybury discloses a system and its corresponding method for generating video summary description data according to a video summary and then producing video analysis result which summarizes the contents of video intervals/segments based on the original video analysis result and the summary rule and constituting video summary interval information; extracting a representative frame based on the video summary interval information, and generating video summary description data accordingly to the analysis (col. 2/line 64 to col. 4/line 25 for video analysis and the steps of generating the summary interval

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information based on the original video and the rule of summary; and col. 7/lines 60 to col. 9/line 25 for an example of how to use the broadcast news editor for correlating news with video and audio information represented by highlight segments on video summary list with indexes to the viewer); and the hierarchical summary DS is already disclosed in details in claim 1 above.

(Claims 19, 21-22, and 24 were cancelled).

As for claims 20, 23, and 33-40 (dependent of claim 18), these claims are rejected for the reasons given in the scope of claims 2, 5, 8, 10-11, and 12-16 above to avoid unnecessary repetitions, not limited to the cited paragraphs but also to the entire disclosure of Maybury's.

(Claims 26, 28-29, 31-32 were cancelled).

As for claims 27, 30, and 41-43 (dependent of claim 25), these claims are rejected for the reasons given in the scope of claims 2, 5, 8, 10-11, and 12 above to avoid unnecessary repetitions, not limited to the cited paragraphs but also to the entire disclosure of Maybury's.

As for claims 51-54 and 56, these claims are rejected for the reasons given in the scope of claims 2, 5, 8, 10-11, and 12 above to avoid unnecessary repetitions, not limited to the cited paragraphs but also to the entire disclosure of Maybury's.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

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8. Claims 44-50 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maybury (US Patent 6,961,954 B1) in view of Ratakonda (US Patent No. 5,995,095).

Regarding claims 44, 47-48, and 55, Maybury discloses all the claiming features as disclosed in claims 1 and 17-18 above, except for a second video summary representative part for playing a second summary level of video interval “wherein the second summary level is summarized more finely than the first summary level”; however, this technique is clearly taught by Ratakonda as Ratakonda teaches to provide a hierarchical video summary (Fig. 8) with different levels and playing the corresponding level of summary (as in Fig. 1 and col. 3/lines 33-64) with same technique of using keyframe IDs for identifying and retrieving of interested video segments for playing and/or presentation (refer to Fig. 2 & col. 5/line 47 to col. 6/line 67).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Maybury’s system with Ratakonda’s teaching technique of using different levels for playing/representing video summary wherein the second level (the coarse) is finer than the first video summary and/or the best summary is the finest 26 is finer than the coarse summary level 24 and the most compact summary 22) as suggested by Ratakonda (refer to col. 2/lines 15-37).

As for claims 45-46 and 49-50, these claims are rejected for the reasons given in the scope of claims 5 and 8 as disclosed earlier.

#### ***Conclusion***

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to PTO New Central Fax number:**

(571) 273-8300, (for Technology Center 2600 only)

*Hand deliveries must be made to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.*



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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (571) 272-7291. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K. Bui', with a long horizontal flourish extending to the right.

Kieu-Oanh Bui  
Primary Examiner  
Art Unit 2611

KB

January 17, 2006